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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/588,464

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Yasuyuki Dewa

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EXAMINER

WOOD, ELLEN S

ART UNIT

PAPER NUMBER

1794

NOTIFICATION DATE

DELIVERY MODE

04/24/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/588,464	<b>Applicant(s)</b> DEWA ET AL.	
	<b>Examiner</b> ELLEN S. WOOD	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 10-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 10-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-3 and 10-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The applicant has amended the claim to ***“a two component copolymer of ethylene and a C1 to C8 alkyl ester of an unsaturated carboxylic acid”***. The specification states that component (B) of the resin composition is an ethylene-unsaturated ester copolymer (pg. 6 lines 24-25). The specifications state a broad copolymer and do not limit component (B) to specifically be a two component copolymer. Claims 2-3 and 10-24 are also rejected as being dependent from the independent claim 1.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1, 3 and 11-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Dawson (US 6,217,982).

In regards to claim 1, Dawson discloses a thermoplastic alloy composition comprising a melt blend of

i) 10-40 wt.% polypropylene (thermoplastic resin)

iii) 20-60 wt.% of an ionomeric copolymer of ethylene, an alpha, beta-unsaturated C<sub>3</sub>-C<sub>8</sub> carboxylic acid, and optionally one or more softening comonomers copolymerizable with ethylene

iv) about 1 to about 5 wt. %, preferably about 2 to about 3 wt. %, copolymer of ethylene and glycidyl acrylate or glycidyl methacrylate (col. 1 lines 46-62). The most preferred ethylene/glycidyl(meth)acrylate copolymers that are used are copolymers of ethylene, ethyl acrylate, and, especially, ethylene, n-butyl acrylate (col. 4 lines 10-13). These are all examples of esters of an unsaturated carboxylic acid. Dawson further states that the ethylene/alkyl (meth) acrylate copolymer can be used (col. 4 lines 14-19). Thus, a two component copolymer of ethylene and a C1 to C8 alkyl ester of an unsaturated carboxylic acid.

The copolymer is about 10 to 70% neutralized with metal ions selected from elements such as sodium, potassium, zinc, calcium, magnesium, lithium, aluminum, nickel, and chromium (col. 3 lines 42-46).

The transitional phrase "consisting essentially of" limits the scope of a claim to the specified materials or steps and those that do not materially affect the basic and novel characteristics of the claimed invention. For the purposes of searching for and

applying prior art under 35 U.S.C. 102 and 103, absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, “consisting essentially of” will be construed as equivalent to “comprising.” If Applicants contend that additional materials in the prior art are excluded by the recitation of “consisting essentially of,” Applicants have the burden of showing that the introduction of additional components would materially change the characteristics of Applicants' invention.

In regards to claim 3, Dawson discloses that the thermoplastic resin is polypropylene (col. 2 lines 46-49), which is known to one of ordinary skill in the art as a polyolefin type resin.

In regards to claims 11-13 and 19-20, Dawson discloses that the composition may be formed into a film and sheets that are free-standing material or as part of a laminated structure (col. 2 lines 32-35).

In regards to claims 14-18 and 21-24, Dawson discloses that the sheet maybe used in a multilayer structure where it would be adhered to other layers by a tie layer except in those cases where the other layers are polypropylene based (thermoplastic polyolefin) and an adhesion could be achieved by co-extrusion or co-lamination (col. 2 lines 53-59).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dawson (US 6,217,982) in view of Hirasawa (US 5,179,168).

Dawson discloses the sheet and films formed from the thermoplastic composition as discussed in the previous section. Dawson is silent with regards to the potassium ionomer comprising two or more types of potassium ionomer.

Hirasawa discloses an ionomer that is formed by neutralizing partially or completely the unsaturated carboxylic acid component of the ethylene/unsaturated carboxylic acid copolymer with at least one alkali metal such as potassium (col. 3 lines 10-16). The blend is characterized in that at least two ionomers are blended (col. 3 lines 65-66). The difference of the unsaturated carboxylic acid content between ionomers differing in the unsaturated carboxylic acid content be at least 2 mole% or higher (col. 3 lines 36-41). The ionomer composition is mixed in a ratio of 5 to 99 parts by weight and the thermoplastic resin is 95 to 1 parts by weight (col. 6 lines 25-37). The composition can be used for a packaging film, a mat, a container, a wall paper sheet, a form of a laminate with other thermoplastic resin, a paper sheet or a metal (col. 5 lines 58-68).

It would be obvious to one of ordinary skill in the art to combine the ionomer composition of Hirasawa with the thermoplastic resin composition of Dawson to form a resin composition that can be molded into articles that have excellent antistatic properties (Hirasawa col. 6 lines 60-63). Also, the resin composition can have

controlled moisture-absorbing properties and water-absorbing properties at very low levels, and therefore, foaming is hardly and molding can be easily accomplished (Hirasawa col. 6 lines 47-59).

### ***Response to Arguments***

7. Applicant's arguments filed 02/10/2009 have been fully considered but they are not persuasive.

8. The applicant argues that Dawson describes a calenderable composition containing a copolymer of ethylene and glycidyl acrylate or glycidyl methacrylate.

Dawson disclose that about 1 to about 5 wt. %, preferably about 2 to about 3 wt. %, copolymer of ethylene and glycidyl acrylate or glycidyl methacrylate (col. 1 lines 46-62). The most preferred ethylene/glycidyl(meth)acrylate copolymers that are used are copolymers of ethylene, ethyl acrylate, and, especially, ethylene, n-butyl acrylate (col. 4 lines 10-13). These are all examples of esters of an unsaturated carboxylic acid. Dawson further states that the ethylene/alkyl (meth) acrylate copolymer can be used (col. 4 lines 14-19). Thus, a two component copolymer of ethylene and a C1 to C8 alkyl ester of an unsaturated carboxylic acid. The examiner respectfully disagrees that Dawson does not disclose component (B) of the applicant's invention.

9. The applicant argues that the presently claimed resin composition can provide superior results in terms of anti-static properties, processability and compatibility. Dawson does not teach or suggest at least how to improve the anti-static properties of a resin composition.

The applicant's independent claim 1 recites a **resin composition**. This is an extremely broad claim and encompasses a wide range of various resin compositions. In determining whether prior art is non-analogous art, while a reference may be directed to an entirely different field of endeavor than that of the claimed invention, the reference is still anticipatory if it explicitly or inherently discloses every limitation recited in the claims. *State Contracting & Eng'g Corp. v. Condotte America, Inc.*, 346 F.3d 1057, 1068, 68 USPQ2d 1481, 1488 (Fed. Cir. 2003). The resin composition as claimed by the applicant has been explicitly disclosed in Dawson.

### **Conclusion**

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.



Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELLEN S. WOOD whose telephone number is (571)270-3450. The examiner can normally be reached on M-F 730-5 with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571)272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rena L. Dye/  
Supervisory Patent Examiner, Art Unit 1794